

COMMON ELEMENTS		PROCESSES AND PROPERTIES INDEX	
<i>Lozhhorrite-rinkolite deposits of the outer belt of the Khibin Mountains. I. S. Oshinskiy. M/m. soc. russ. mineral. 66, 355-414 (in English 414 15) (1935). The field relations and petrography of 4 lozhhorrite and rinkolite deposits occurring in pegmatites associated with rocks of the nephelite-syenite series are described. Six complete analyses and 1 partial analysis of lozhhorrite show that there is considerable variation between samples from different localities, particularly in Sr, Ca and Th. Three analyses show that rinkolite is somewhat lower in TiO₂, CaO and rare earths than is lozhhorrite, although not sufficiently to indicate that the 2 are fundamentally different chemically. The minerals undoubtedly belong to the riosandrite group. Crystallographic and optical data are given. The m. ps. of 2 lozhhorrites were detd. as 1300° and 1307° and of 2 rinkolites as 1215° and 1400° (all ±25°). The differences in m. p. are probably the result of differences in compn. Lozhhorrite fused with E and W compn. as rinkolite. Thin sections of isotropic lozhhorrite examd. under the Endel heating microscope acquired the optical properties of rinkolite, and thermal curves show that lozhhorrite changes to rinkolite at 721-730°. It is believed that the amorphous lozhhorrite is formed from cryst. rinkolite by a process of breaking down of the internal structure.</i> R. H. Beckwith		7	
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION		167080 * 1	

BILIBINA, T.V.; BOGDANOV, Yu.V.; OZHINSKIY, I.S.

Formation of uranium ores of the sedimentary-metamorphic type in
pre-Cambrian marbles and rocks of the skarn type. Zap.Vses.min.ob-va
88 no.4:369-376 '59. (MIRA 12:11)

1. Deystvitel'nyye chleny Vsesoyuznogo mineralogicheskogo obshchestva.
(Uranium ores)

Ozhogin, I.I.

IVANOV, Nikolay Ivanovich; OZHOGIN, I.I., otvetstvennyy red.; IL'INSKAYA, G.M.,
tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[The coal industry; a guidebook] Ugol'naya promyshlennost'; putevoditel'.
Moskva [Ugletekhizdat, 1957] 178 p. (MIRA 11:1)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka, 1956.
(Moscow--Coal mining machinery--Exhibitions)

OZHOGIN, S.

Improvements in the village of Viryatino. Sel'. stroi. 14 no.11:7-8
N '59 (MIRA 13:3)

1. Predsedatel' kolkhoza "Put' Lenina", Sosnovskogo rayona, Tam-
bovskoy oblasti.
(Viryatino--Building)

PAVLENKO, S. M. OZHOGIN, V.

Physiology, Pathological

Brief news, Zhur. vys. nerv. deist., 2, no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 195^X~~2~~ Uncl.

ZLOTIN, G.N., kand tekhn. nauk; LEONT'YEV, G.A., kand. tekhn. nauk;
OZHOGIN, V.A.

Capacitance torsion meter. Avt. prom 30 no.7:31-33 J1 '64.
(MIRA 17:9)

1. Volgogradskiy politekhnicheskii institut.

OZHOGIN, V. I.

82595

S/056/60/039/01/03/029
B006/B070

24.7900
24.2200

AUTHORS: Borovik-Romanov, A. S., Ozhogin, V. I.

TITLE: The Weak Ferromagnetism in an Antiferromagnetic CoCO_3 Single Crystal

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 39, No. 1 (7), pp. 27-36

TEXT: The present work is the continuation of an earlier work (Ref. 1) where the discovery of weak ferromagnetism in polycrystalline cobalt- and manganese carbonate crystals is reported. The authors have now investigated the magnetic properties of CoCO_3 single crystals in the temperature range of 1.3 to 300°K by a balance method due to Faraday. The results of measurements are shown in diagram form. Fig. 1 shows the dependence of the molar magnetic moment m on the magnetic field strength H . The five upper curves are for $H \perp z$, and the lower ones for $H \parallel z$, z being the trigonal axis. Fig. 2 shows the angular dependence of the projection of the magnetic moment on the H -direction in the (yz) plane

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82595

The Weak Ferromagnetism in an Antiferromagnetic CoCO_3 Single Crystal

S/056/60/039/01/03/029
B006/B070

an anomalously large anisotropy of susceptibility ($\sim 30\%$ at 300°K). T_N lies at 18.1°K . CoCO_3 is further distinguished by its large spontaneous ferromagnetic moment ($\sigma_0 \approx 1440$ CGSM/mole) and the sharp peak near T_N . The

latter can be explained by the thermodynamic theory of weak magnetism, and can be related to the fact that, when a magnetic field acts on a substance in a disordered state, it induces an antiferromagnetic ordering in it. The anomaly observed in the temperature dependence of the spontaneous moment at low temperatures (Fig. 6) can be explained within the framework of the spin wave theory as being due to a transition from the excitation of a single branch to the excitation of both branches of the spin wave spectrum. Here, as well as in the case of MnCO_3 , the

predictions of the spin wave theory do not show quantitative agreement. The authors thank, in conclusion, Academician P. L. Kapitza for his interest in the work, I. Ye. Dzvaloshinskiy and N. M. Krevnes for discussions, N. Yu. Ikornikova for having supplied the sample, and V. I. Kolokol'nikov for help in the experimental work. There are 7 figures and 10 references: 8 Soviet and 2 French.

Card 3/4

OZHOGIN, V.I.

The antiferromagnetic substances CoCO_3 , CoF_2 and FeCo_2
in strong fields. Zhur. eksp. i teor. fiz. no.5:1687-1690 N '63.
(MIRA 17:1)

ACCESSION NR: AP4019217

S/0056/64/046/002/0531/0536

AUTHOR: Ozhogin, V. I.

TITLE: Magnetic moment relaxation in an antiferromagnet with anisotropy of the "easy plane" type

SOURCE: Zhurnal eksper. i teor. fiz., v. 46, no. 2, 1964, 531-536

TOPIC TAGS: magnetic moment, antiferromagnet, magnetic moment relaxation, easy plane anisotropy, three-magnon process, antiferromagnetic resonance, line width, spin flip, spin flipped sublattice

ABSTRACT: The relaxation time is calculated for the case when the magnetic moment of an antiferromagnet is perpendicular or parallel to the magnetic field in an "easy" plane, when the relaxation proceeds via three-magnon processes, which are possible at not very low temperature, in contrast with antiferromagnets with anisotropy of the "easy access" type, which were shown by Urushadze (ZhETF v.

Cord: 1/3

ACCESSION NR: AP4019217

39, 681, 1960) to be impossible in this case, since they violate the energy and momentum conservation law. The antiferromagnetic resonance line width due to these processes can depend strongly on the field if the antiferromagnet has weak ferromagnetism. Only processes involving three spin waves are considered, since those involving four spin waves turned out to be of one order of magnitude lower. It is also shown that three-magnon processes can have a significant value for relaxation in antiferromagnets with "easy access" anisotropy if the sublattices are "flipped." The equations obtained for the relaxation time, the magnetic moment and line width of the corresponding resonances, as functions of the temperature and magnetic fields, are valid in the framework of the spin wave theory and their contribution to the relaxation at not too low fields and temperatures is found to be decisive in comparison with contributions of higher orders. It is pointed out that conditions for experimental verifications of the theoretical results are favorable since the frequencies of the corresponding resonances lie in the microwave

Card. 2/3

ACCESSION NR: AP4019217

region. "We take this opportunity to express deep gratitude to A. S. Borovik-Romanov for helpful discussions." Orig. art. has: 13 formulas and 1 figure.

ASSOCIATION: None

SUBMITTED: 23Apr63

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: PH

NO REF SOV: 008

OTHER: 001

Card 3/3

L 58450-65 EWT(1) LIP(c)
ACCESSION NR: AP501389

UR/0056/65/048/005/1307/1318

AUTHOR: Ozhogin, V. I.

TITLE: Nonlinear dynamics of antiferromagnetics with anisotropy of the "easy plane" type

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 5, 1965, 1307-1318

TOPIC TAGS: antiferromagnetism, quantum mechanical calculation, nonlinear effect, anisotropy, Dzyaloshinskiy field, pumping instability, spin wave spectrum

ABSTRACT: A phenomenological quantum-mechanical calculation of various types of nonlinear dynamic phenomena is carried out for antiferromagnets with anisotropy of the "easy plane" type. These phenomena are of interest because of their susceptibility to detailed investigation by modern experimental methods. It is shown, in particular, that the threshold field for occurrence of parallel pumping instability is inversely proportional to the Dzyaloshinskiy field responsible for weak ferromagnetism. Also calculated are effects of a combination type, connected with the

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L 58450-65

ACCESSION NR: AP5013889

2

interaction of two branches of the spin-wave spectrum (low and high frequency). The effects considered are 4- and 3-magnon instability of low and high frequency antiferromagnetic resonance, low and high frequency parallel pumping, parametric sum resonance, and parametric difference resonance. "I am deeply grateful to A. S. Borovik-Romanov and V. Bar'yakhtar for meaningful discussions." Orig. art. has: 1 figure, 33 formulas, and 1 table.

ASSOCIATION: None

SUBMITTED: 05Oct64

WFI: 0

REF CODE: EN NP

REF KEY BOW: 008

OTHER: 0

178 2:2

RUSINKOVSKIY, Yuriy Pavlovich, inzh.; KAPLAN, Musiy Abramovich, inzh.;
OZHOGIN, V.Ya., inzh., retsenzent; TSYBA, L.A., inzh., red.
izd-va; SHAFETA, S.M., tekhn. red.

[Automatic control of gas-fired boiler rooms] Avtomatizatsiya ga-
zifitsirovannykh kotel'nykh. Kiev, Gostekhzdat USSR, 1963. 115 p.
(MIRA 16:3)

(Boilers) (Automatic control)

OGHOGIN, V.Ya.

Republic exhibition of teaching machines. Izv. vys. ucheb.
zav.; radiotekh. 7 no.1:127-128 Jan'64. (MIRA 17:5)

FIRSANOVA, Ye.N.; ARABYAN, S.G.; OZHOGINA, M.M.

Effect of the alkalinity of oils with additives on engine wear. Khim. i tekhn. topl. i masel 8 no.9:59-64 S '63.

(MIRA 16:11)

1. Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy traktorny institut.

OZHOGINA, Ye. P.

Vitamin C insufficiency in healthy and tuberculous inhabitants
of the Far North. Probl. tub. no.2:30-32 '62.

(MIRA 15:2)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - prof. A. D. Semenov) i kafedry legochnogo tuberkuleza Gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S. M. Kirova (dir. - dotsent A. Ye. Kiselev, zav. kafedroy - prof. A. D. Semenov), Leningrad.

(RUSSIA, NORTHERN--TUBERCULOSIS)
(ASCORBIC ACID)

37249

S/200/62/000/002/002/003
D204/D301

18.1495

AUTHORS: Valtsev, V.K., Oziashvili, Ye.D., and Solov'yev, L.K.

TITLE: Zone crystallization of lanthanon compounds from certain molten salts

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye, Izvestiya, no. 2, 1962, 53 - 57

TEXT: Description of an investigation aimed at clarifying the rules prevailment during the zone crystallization of complex systems of lanthanon compounds from fused NH_4NO_3 and NH_4CNS (as oxides) and MgCl_2 and BaCl_2 (as chlorides). The following mixtures were tested (%): (1) La 2.5, Pr 8-11, Nd 86.84, Sm 2-3, and (2) Pr 3.66, Sm 29.3, Eu 1.0, Gd 24.3, Dy 5.77, Ho 0.5, Er 4.7, La, Tb, Yb 1, Y 25.2. The melts were cast into rods which were then zone crystallized 6-9 times, passing the zone at 5 cm/hr. The experimental method for chloride melts is indicated; for the other two the procedure was that used earlier. Sections of rod were then analyzed spectrographically for the lanthanons. The results are tabulated and discussed. X
Card 1/3

Zone crystallization of lanthanon ...

S/200/62/000/002/002/003/
D204/D301

sed. In NH_4NO_3 the heavier elements tended in general to concentrate at the end of the bar and the same was observed for Sm (mixture (1)) in the NH_4CNS melt. Similar tendencies were observed for the chloride melts although the results were only qualitative. It is concluded that (a) zone crystallization from NH_4NO_3 or NH_4CNS is promising owing to the low temperature of the process. The chloride process is further made difficult due to the hygroscopic properties of the lanthanon chlorides. (b) Concentration of the heavier elements at the end of the bar is probably due to their lower m.p.'s although discrepancies to this rule were observed. (c) Relative proportions of the lanthanons (mixture (1)) in NH_4NO_3 and NH_4CNS melts were relatively unaltered after zone crystallization. The distribution is probably affected rather more in the high temperature chloride process. Analytical work was carried out by R.R. Shvangiradze. There are 3 tables and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: H. Reed, B.S. Hopkins; J. Amer. Chem. Soc., 57, 1159, 1935.

Card 2/3

5.244 0

10530
S/251/62/029/003/001/001
D287/D307

AUTHORS: Ozinshvili, Ye.D., Nikolayev, Yu.V. and Myasoyedov, N.F.

TITLE: On the possibility of using NO - H₂O isotope exchange in nitric acid solutions for concentrating ¹⁸O

PERIODICAL: Soobshcheniya akademii nauk Gruzinskoy SSR, v. 29, no. 3, 1962, 289-292

TEXT: The heavy isotope ¹⁵N can be obtained by isotope exchange in the system: nitric acid (aqueous solution) - nitric oxide, the isotope being concentrated in the aqueous phase. The gaseous phase of the same system contains increased quantities of the heavy isotope ¹⁸O. Isotope exchange occurs between NO and H₂O and is accelerated by HNO₃. Exchange columns, used for concentrating ¹⁵N, can also be utilized for increasing the rate of this process. The apparatus for the separation of ¹⁸O and the apparatus for ¹⁵N concentration can be operated simultaneously. The authors con-

Card 1/2

VLASENKO, V.A.; GVERDTSITELI, I.G.; NIKOLAYEV, Yu.V.; OZIASHVILI, Ye.D.

Production of the isotope B^{10} by the exchange distillation of the complex $(CH_3)_2O.BF_3$. Soob. AN Gruz. SSR 33 no.1:79-84
Ja '64.

(MIRA 17:7)

1. Fiziko-tekhnicheskiy institut AN Gruzinskoy SSR. Predstavleno akademikom G.V. TSitsishvili.

ACCESSION NR: AP4018354

S/0251/64/033/001/0079/0084

AUTHORS: Vlasenko, V. A.; Gverdtsiteli, I. G.; Nikolayev, Yu. V.; Oziashvili, Ye. D.

TITLE: Production of B^{10} isotope by the method of exchange distillation of the $(CH_3)_2O \cdot BF_3$ complex (Presented by academician G. V. Tsitsishvili, Oct. 10, 1962)

SOURCE: AN GruzSSR. Soobshcheniya, v. 33, no. 1, 1964, 79-84

TOPIC TAGS: boron, boron isotope, boron trifluoride, methyl ether, ether fluoride complex, distillation, exchange distillation, neutron, thermal neutron

ABSTRACT: Since the B^{10} isotope possesses a large thermal neutron capture cross section, a method was developed which permitted the enrichment of boron with the B^{10} isotope. This method is based on the principle of exchange distillation of the complex $(CH_3)_2O \cdot BF_3$ in a pilot fractionating column at 100C, at a pressure of 150 mm mercury. Its daily capacity amounted to 10 g of boron containing 80% B^{10} , while in the issuing complex the concentration amounted to only 16%. The separation of the boron isotopes is achieved by vaporization of the fluid $(CH_3)_2O \cdot BF_3$ phase and condensation of the gaseous BF_3 phase. The result is an enrichment of the fluid phase with B^{10} and a corresponding depletion of B^{10} in the gaseous phase, according

Card 1/2

ACCESSION NR: AP4018354

to the formula $(\text{CH}_3)_2 \text{O} \cdot \text{B}^{11}\text{F}_3 + \text{B}^{10}\text{F}_3 \rightleftharpoons (\text{CH}_3)_2 \text{O} \cdot \text{B}^{10}\text{F}_3 + \text{B}^{11}\text{F}_3$.

In view of the corrosive properties of the $(\text{CH}_3)_2 \text{O} \cdot \text{BF}_3$ complex, only corrosion resistant materials were used in the installation, such as stainless steel, copper, lead, teflon, and polyethylene. Orig. art. has: 1 picture, 1 chart, and 1 table.

ASSOCIATION: Akademiya Nauk Gruzinskoy SSR, Fiziko-tekhnicheskiy institut (Academy of Sciences Georgian SSR, Physical and Technical Institute)

SUBMITTED: 25Aug62

DATE ACQ: 19Mar64

ENCL: 00

SUB CODE: CH

NO REF SOV: 004

OTHER: 003

Card 2/2

OZIASHVILI, Ye.D.; NIKOLAYEV, Yu.V.; MYASOYEDOV, N.F.

Applicability of isotope exchange between NO and H₂O in nitric acid solutions for an O¹⁸ concentration. Soob. AN Gruz. SSR no. 3:289-292 S '62 (MIRA 19:1)

1. Fiziko-tekhnicheskii institut AN GruzSSR. Submitted September 14, 1961.

OZIEBLO, Leszek; PASZKO, Zygmunt

Activity of beta-glucuronidase of the blood serum in menstruating pregnant and puerperal women. Ginek. Pol. 35 no.3:361-365
My-Je '64

1. Z II Kliniki Położnictwa i Chorob Kobietych Akademii Medycznej w Warszawie (Kierownik: prof. dr. med. I. Roszkowski).

7

CA

Determination of formaldehyde in mixtures with hexamethylenetetramine. M. Dorer and M. Gzinski, *Farm. Glaznik* 5, No. 9/10, 174-8(1949).—For detg. HCHO in mixts. with hexamethylenetetramine, in addn. to the very exact Hichi method (C.A. 33, 9559), the volumetric method by Rouijn (Z. anal. Chem. 36, 10(1897)) can be used. As reagent, a soln. of I at least 0.1 N must be used. A ppt. of complex compds. of hexamethylenetetramine with I has no effect upon the results.
E. J. Frelih

Ozremska, H.

OZIEMSKA H.

Posiklania w plonicy leczonej penicylina, sulfonamidami i ogjawowo.
/Complications in scarlet fever treated with penicillin, sulfonamides
and symptomatically/ Pediat. polska 24:8 Aug 50 p. 668-82.

1. Of the Second Clinic for Children's Diseases of Warsaw Medical
Academy (Head—Prof. Wl. Szenajch, M.D.).
CML Vol 20, No. 2 Feb 1951

MACIEJEWICZ, Maria; OZIEMSKA-LOZINSKA, Halina; TYRMAN, Jadwiga

Bacteriological evaluation of diagnostic methods in diphtheria. Med. dosw.
mikrob. 10 no.2:213-221 1958.

1. Z Miejskiego Szpitala Zakaznego Nr 3 w Warszawie Dyrektor: dr med.
M. Pomerska.

(DIPHTHERIA, diagnosis,
bacteriol. evaluation (Pol))

OZIEMSKA-LOZINSKA, Halina

Diffusely chronic hepatitis following viral hepatitis. Przegl.
epidem. 18 no.4:459-464 '64.

1. Z Miejskiego Szpitala Zakaznego Nr. 3 w Warszawie (Dyrektor:
dr. med. W. Gloksin).

OZIEMSKA, H.

Treatment of whooping cough with streptomycin. *Pediatr polska* 26
no.5:512-521 May 1951. (CML 21:1)

1. Of the Clinic for Children's Infectious Diseases (Head — Prof.
J. Bogdanowicz, M.D.) of Warsaw Medical Academy.

OZIEMSKA, Halina

KUNICKA, Ann; OZIEMSKA, Halina; WIERUCHOWA, Maria

Agglutinin level in diphtheria. Postępy hig. med. dosw. 11 no.2:173-177
1957.

1. Zakład Mikrobiologii i Immunologii Instytutu Matki i Dziecka.
Warszawa, ul. Kasprzaka 17.
(DIPHTHERIA, immunology.
agglutinin level, review (Pol))

OZIEMSKI, Stanisław, dr inż.

Dynamic forces generating in full-web overhead traveling cranes during the moment of taking up the load from the base. Przegl mech 21 no.22:686-690 25 N '62.

1. Politechnika, Warszawa.

OZIEMSKI, Stanislaw

Problems of rigidity and damping capacity of hoisting cables.
Archiw bud masz 10 no. 2: 173-87 '63.

1. Katedra Dzwignic, Politechnika, Warszawa.

OZIEMSKI, Stanislaw (Warszawa)

Effect of acceleration on the work of lifting installations.
Archiw bud masz ll no.2:266-267 '64

OZIEMSKI, Stanislaw, dr inz., adiunkt

The work of crane ropes during a period of unsteady movements.
Przegl mech 23 no. 3:71-73 10 F '64.

1. Katedra Dzwignic, Politechnika, Warszawa.

OZIEMSKI, Stanislaw, dr inz., adiunkt

Economic significance and development of truck cranes.
Przegl mech 23 no. 5:138-141 10 Mr '64.

1. Katedra Dzwignic, Politechnika, Warszawa.

CZHINKOV, G.

Toward unified procedures. Izobr.i rats. no.6:44 Je '60.

(MIRA 14:2)

1. Starshiy inzhener Tsentral'nogo soveta Vsesoyuznogo obshchestva
izobretateley i ratsionalizatorov.

(Technological innovations--Accounting)

OZHIMKOV, G., inzh.

What is a plan for the introduction of suggestions? Izobr.i rats.
no.12:46-47 D '60. (MIRA 13:12)

1. TSentral'nyy sovet Vsesoyuznogo obshchestva izobretateley i
ratsionalizatorov.
(Technological innovations)

KORNILOV, I.I.(Moskva); OZHIMKOVA, O.V.(Moskva); PRYAKHINA, L.I.(Moskva)

Correlation between the composition, the temperature and the
heat-resistance of alloys in the system nickel-chromium-tungsten-
titanium-aluminum. Izv. AN SSSR. Otd.tekh.nauk. Mat.i topl.
no.5:136-141 S-O '60. (MIRA 13:11)

(Nickel-chromium-tungsten-titanium-aluminum alloys)
(Phase rule and equilibrium)

OZHINSKIY, I.S.

3(5)

PHASE I BOOK EXPLOITATION

SOV/1192

USSR Ministerstvo geologii i okhrany nedr

Geologiya SSSR, t. XXVII: Murmanskaya oblast'. Ch. I, Geologicheskoye opisanie. (Geology of the USSR, v. 27. Murmanak Oblast. Pt. I, Geological Description) Moscow, Gosgeoltekhizdat, 1958. 714 p. 4,000 copies printed.

Editorial Staff: Abdullayev, Kh.M., Aladinskiy, P.I., Aliyev, M.M., Amiraslanov, A.A., Antropov, P.Ya. (Chief Ed.), Aslanyan, A.T., Assovskiy, A.N., Bakirov, A.A., Belevtsev, Ya.M., Belousov, V.V., Belyayevskiy, N.A. (Dep. Chief Ed.), Betekhtin, A.G., Bogdanov, A.A., Bogatyrev, A.S., Vas'kovskiy, A.P., Veber, V.V., Golubin, V.N., Dzhanelidze, A.I., Drabkin, I.Ye., Yershov, V.A., Zaytsev, I.A., Kereselidze, K.G., Koptev - Dvornikov, V.S., Kreyter, V.M., Krasnikov, V.I. (Dep. Chief Ed.), Kuz'menko, V.I., Librovich, L.S., Lungersgauzen, G.F., Magak'yan, I.G., Malinovskiy, F.M. (Dep. Chief Ed.), Marinov, N.A., Markovskiy, A.P., Merkulov, M.I. (deceased), Mirlin, G.A., Mirchink, M.F., Nalivkin, D.V., Nedzvetskiy, A.P., Nikitin, P.M., Nikolayev, V.A. (Dep. Chief Ed.), Paffengol'ts, K.N., Saks, V.N., Satpayev, K.I., Semenenko, N.P., Sinitsin, N.M., Snyatkov, L.A., Strakhov, N.M., Tatarinov, P.M., Tyzhnov, A.V.

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Geology of the USSR (Cont.)

SOV/1192

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Geology of the USSR (Cont.)

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Ch. VII. History of Geological Development (Kharitonov, L.Ya.)

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AVAILABLE Library of Congress

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MM/gmp
3-6-59

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OZHIMKOV, G., inzh.

Measure with rubles. Izobr.i rats. no.4:40-41 Ap '60.
(MIRA 13:6)
1. TSentral'nyy Sovet Vsesoyuznogo obshchestva izobretateley i
ratsionalizatorov.
(Efficiency, Industrial)

VAL'TSEV, V.K.; OZIASHVILI, Ye.D.

Distribution of rare earth elements in the hydrolysis of alloys of their oxides with aluminum thiocyanate. Izv.Sib.otd.AN SSSR no.6:59-64 '60. (MIRA 13:9)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.
(Rare earths) (Aluminum alloys)

22876

S/089/61/010/005/004/015
B102/B214

21,3200

AUTHORS:

Gverdtseteli, I. G., Nikolayev, Yu. V., Oziashvili, Ye. D.,
Ordzhonikidze, K. G., Muskhelishvili, G. N., Kiladze, N. Sh.,
Mikirtumov, V. R., Bakhtadze, Z. I.

TITLE:

An automatic cascade apparatus for obtaining highly
concentrated heavy nitrogen isotope

PERIODICAL:

Atomnaya energiya, v. 10, no. 5, 1961, 487-492

TEXT: The growing use of N^{15} in different domains (for example, N^{15}
nitrates in homogeneous reactors; N^{15} has a thermal neutron capture cross
section of $2 \cdot 10^{-5}b$, whereas the value for natural nitrogen is 1.8 b) makes
it of interest to develop suitable methods for the preparation of this
isotope. The principal difficulty lies in the smallness (0.365%) of N^{15}
content in the natural nitrogen. Spindel and Taylor (Ref. 1: W. Spindel,
T. Taylor. J. Chem. Phys., 23, 981 (1955); 24, 626 (1956); Trans. N. Y.
Acad. Sci., 19, 3 (1956); T. Taylor, W. Spindel. Proceedings of the

Card 1/4

22876

S/089/61/010/005/004/015
B102/B214

An automatic cascade apparatus for...

International Symposium on Isotope Separation. Amsterdam, North - Holland Publishing Company, 1958, p. 158; L. Kauder, T. Taylor, W. Spindel. J. Chem. Phys., 31, 232 (1959)) have developed a cascade apparatus with two columns allowing N^{15} to be obtained with 99.8 % purity. On this basis the authors of the present paper have developed and constructed an automatic cascade apparatus that allows 99.8 % pure N^{15} to be obtained from natural nitrogen by the method of $NO-HNO_3$ exchange. The yield is about 0.5 g per day. The chemical exchange $NO-HNO_3$ is described in Ref. 1, and also in the introduction of the present paper. Fig. 2 shows the scheme of construction of the actual automatic apparatus; 3 and 6 (in Fig. 2) correspond to the first and the second column of the cascade. The HNO_3 is conveyed from the reservoir 1 to the first column via a regulating valve 4 and a flow meter 2. The enriched solution is taken through a regulating valve 5 and a second flow meter 2 to the upper part of the second column for further enrichment, the remaining part flowing through the sleeve pipe 7 into the reactor. In the reactor $10 HNO_3$ reacts with SO_2 . The oxide

Card 2/4

An automatic cascade apparatus for...

S/089/51/010/005/004/015
B102/B214

mixture produced is led into the column 3 where it reacts with nitric acid with isotope exchange. The HNO_3 from column 6 enters the reactor 9 (which is analogous to the reactor 10). The nitric oxide from the reactors is brought back to the column 6 and reaches finally the lower part of the first column. The NO free of N^{15} is discharged from the cascade; the H_2SO_4 formed in the reactors is led off to the reservoir. The HNO_3 enriched in N^{15} is led away from the lower part of the second column through an electromagnetic dropper 8. Columns, valves, and connecting pieces are made of nonrusting steel of the type 1X19H9T (1Kh19N9T). The packing material is teflon. The reactors consist of quartz. The automatic regulation is related to the stabilization of the acid and water flows in the large and small reactor, to the stabilization of the quantity of the discharged product (acid), and the regulation of the gas addition. The regulating system consists of the automatic stabilizers, a signal block controlling the automatic regulators and stabilizers, and a feeding block. The whole regulating system is free from contacts in its working and must give an accurate and reliable performance over a period of

Card 3/4

22876

An automatic cascade apparatus for...

9/089/61/010/005/004/015
B102/B214

operation. The enriched samples (N_2 and NO) were subjected to a mass spectroscopic investigation which allowed the isotopic composition to be determined to an accuracy of $\pm 0.02\%$. Depending on the amount of nitrogen taken the concentrations are given by:

Nitrogen taken, g/day	N^{15} concentration, %
0.55	99.8
0.69	64
0.84	50

X

The authors thank V. A. Vlasenko, R. V. Tishohenko, R. M. Sakandelidze, D. K. Puradashvili, G. L. Partsakhashvili, L. V. Yermakova, A. M. Gasparov, M. S. Mikhelashvili, L. I. Chernova, S. V. Bubnov, and I. A. Kuras for collaboration. There are 5 figures, 1 table, and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

SUBMITTED: June 7, 1960

Legend to Fig. 2: Specifications of length in mm; (A) outlet of the product.

Card 4/4 (NOTE: Due to the size of the figure, we were unable to fit it to a master.)

YUGOSLAVIA/Chemical Technology. Chemical Products and Their
Application. Ceramics. Glass. Binding Materials.
Concrete.

Abstr Jour: Ref Zhur-Klin., No 10, 1959, 3566k.

Author : Dokascania, S., Porlac, M., Koznik, S., Lindner, M.
Ozin, V., Benckwald, S.
Inst : Slovene Chemical Society
Title : Yugoslav Corundum Production.

Orig Pub: Vestnik Slov Kem Drustva, 4, No 1-2, 65-63 (1957) (in
Slovene with an English summary)

Abstract: Geological and chemical prospecting has led to
the discovery of a deposit of bauxites suitable for
the production of corundum. A plant constructed at
the site is now furnishing all of Yugoslavia's abra-
sives demand. -- From a summary by the authors.

Card : 1/1

4-39

OZIM, V., KOTNIK, S., SORSAK, V.

Qualified chemical workers under the conditions prevailing in the Yugoslav chemical industry. p. 51

Slovensko kemijsko drustvo. VESTNIK. Ljubljana, Yugoslavia, Vol. 5, No. 1/2, Jan/June 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 8, Aug. 1959
Uncl.

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Vol. 6, no.1, April, 1955

NOVA PROIZVODNJA

SO:Monthly List East European Accessions (EEAL), LC, Vol. 5 No. 3
March, 1956

OZIM, IV.

Effect of raw materials on production of calcium carbide. p. 49
NVA PROIZODNJA (Uprava za napredek v proizvodnji)
Ljubljana, Vol. 7, no. 1, Mar. 1956

SOURCE: East Europe Accession Lists (EEAL),
Library of Congress, Vol. 5, no. 11, Nov. 1956

OZIMEK, S.

"An imposing panorama, and a more modest project; a motion-picture review."

p. 15 (Zolnierz Polski) No. 2, Jan. 1958
Warsaw, Poland

• SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

02/11/57. S.

OZIMEK, S.

The motion-picture forepost of the Polish Army, also at the present time.

p. 16 (Zolnierz Polski) No. 22, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

OZIMEK, S

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Nights in Vienna.

p. 10 (Zolnierz Polski) No. 23, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

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Gina and the Italian Higher School of Education; a modern-picture review.

P. 15 I (AOLNIERZ POLSKI) (Warszawa, Poland) No. 4, Jan. 1958

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

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"30 years above Warsaw."

p. 19 (Zolnierz Polski) No. 2, Jan. 1958
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

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POLAND, WARSZAWA.

So: East European Accession, Vol. 6, No. 5, May 1957

OZIMEK, S.

OZIMEK, S. From visiting the art exhibition "From David to Cezanne." p. 24.

No..13, July 1956.
ZOLNIERZ POLSKI
MILITARY & NAVAL SCIENCES
Warszawa, Poland

So: East European Accession, Vol. 6, No. 2, Feb. 1957

L 20521-66 EWT(1) SOTE 20
ACC NR: AP5022948 (2) SOURCE CODE: 10/0094/65/000/028/0003/0009
AUTHOR: Ozimek, S. 28
ORG: none B
TITLE: Parachute jump training on brake cables anchored to high peaks
SOURCE: Zolnierz Polski, no. 28, 1965, 8-9
TOPIC TAGS: parachute, military training, military personnel, specialized training
ABSTRACT: Troops consisting of infantrymen, skiers, drivers, snipers, and swimmers learn parachute jumping by training on brake cables anchored to high peaks. The training is under the direction of Major Stanislaw Rekiert who is finishing his studies in geography at the Jagiellon University, writing a thesis about the suburbs for his master's degree. Orig. art. has: 2 figures.
SUB CODE: 15 SUMM DATE: none

Cord 1/1 -llc

OZIMIC, M.

Colorimetrid Determination of ergot alkaloids. p. 13

Slovensko kemijsko drustvo VESTNIK. Ljubljana, Yugoslavia. Vol. 5, No. 1/2,
Jan./June 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 8, Aug. 1959
Uncl.

OZIMIC-TRAMPUZ, Lea

Organization of health education in obstetrical wards. Higijena, Beogr.
9 no.2-3:193-195 1957.

(HEALTH EDUCATION
of pregn. women (Ser))

OZIMIC - TRAMPUZ, Lea

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: [not given]

Affiliation:

Source: Ljubljana, Zdravstveni Vestnik, Vol XXX, No 1-2, 1961, pp 6-12

Data: "Epidemiological Aspects of Puerperal Mastitis."

Authors:

TRAMPUZ, Vladimir, Clinic for Gynecology and Obstetrics (Klinika za Ginekologijo in Porodnistvo) of the Faculty for General Medicine and Stomatology (Fakultet za Splosno Medicino in Stomatologijo), Ljubljana; Director (Predstojnik): Prof Dr F Novak

OZIMIC-TRAMPUZ, Lea (Presumed: same affiliation as for V. Trampuz)

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LIKAR, Miha, Microbiological Institute (Mikrobioloski Institut) of the Faculty for General Medicine and Stomatology, Ljubljana; Director: Prof Dr M Valentincic

1. CZINOV, B.; GOYGO, Ye.; ALIANOVSKIY, I.

2. USSR (600)

4. Cheese - Analysis

7. Method for speedy determination of moisture in process cheese. No. 12, No. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress. March, 1953. unclassified

OZIMOV, B. B.

K. V. Flerov and B. B. Ozimov - "Absorption spectra of solutions of organic dyes and inorganic salts in the red region." (p. 789)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1950, Vol. 20, No. 5

CA

Absorption spectra of solutions of organic dyes and of inorganic salts in the red region. K. V. Fikrov and B. V. Oskarov (Inst. Refrig. and Milk Ind., Leningrad). *Zhuv. Obshchei Khim.* (J. Gen. Chem.) 20, 780-83 (1950).—Inorg. salt solns. imitating the colors of Bogen indicator (phenolphthalein, methyl red, dimethyl aminobenzene, bromothymol blue, and thymol blue) solns. at pH from 2.4 to 3.2 were prepd. by mixing definite proportions of aq. solns. of CoCl_2 and FeCl_3 , and the absorption spectra compared for solns. appearing to have an identical color either visually or photocolormetrically. Examples of the compns. of the imitation solns. (in ml. 0.070325 g./l. CoCl_2 soln., ml. 0.0071370 g./l. FeCl_3 soln., and ml. H_2O) made up by visual estn., are: for pH 2.4, 1.00, 0.15, and 0.25; for pH 3.2, 1.00, 0.20, and 0.20. Spectra of the indicator and the imitation solns. coincide in the range 6900-5100 Å., and the coincidence is better with solns. chosen by visual estn. of the color rather than by photocolormetry with Se cells, on account of the poor red-sensitivity of the latter. N. Thon



CA

Simple photometer to determine solution concentrations directly in test tubes. B. V. (Leningrad Inst. Refrig. and Dairy Ind.). *J. Applied Chem. U.S.S.R.* 23, 171-4 (1950) (Engl. translation); *Zhur. Priklad. Khim.* 23, 168-9. — A simple, sensitive photometer is described in which an ordinary test tube replaces a test cell. Two models are illustrated (a) equipped with optical compensation and (b) with electrical compensation—inserting a variable resistance in the circuit of one of the photoelec. elements. M. McMahon

1ST AND 2ND ORDERS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH ORDERS									
BC																				C7 4									
1958 Optical comparison. B. V. Gaimov U. S. S. R. Chem. USSR, 1958, 44, 44-45. The instrument described enables the colours of two solutions to be compared by placing the solution under test alongside the standard one and changing the standard solution until both specimens visible through the eyepiece appear identical in colour. The optical comparison is especially useful if solutions to be compared are optically non-homogeneous; in such cases a photocolourimeter cannot be used. J. B. J. ZADA.																													
1958-51A METALLURGICAL LITERATURE CLASSIFICATION										1958-51A										1958-51A									
1958-51A										1958-51A										1958-51A									
1958-51A										1958-51A										1958-51A									

CA

In memory of B. G. Tideman. B. V. Ozimov. Zhur.
Prilad. Khim. (J. Applied Chem.) 23, 1007-8 (1950).--
Obituary of Tideman (1879-1942), an authority on the
chemistry of combustion. G. M. Kosolapoff

USSR/Chemistry - Colorimetry

Jun 52

"The Effect of Colloids on the Accuracy of Photocolorimetric Analysis," K. V. Flerov, B. V. Ozimov, Leningrad Inst of the Refrigeration and Dairy Ind

"Zhur Prikl Khim" Vol XXV, No 6, pp 634-639

The effect of a colloidal dispersion system on photocolorimetric analysis was investigated with colored solns of inorg salts in all ranges of the spectrum. It was shown that the smallest errors occur in colorimetry of solns with high absorption (in the region of red, blue and violet) and the greatest errors in those with low adsorption (yellow).

218735

USSR/Chemistry - Colorimetry (Contd)

Jun 52

With increasing concn of the colored soln, the measurement error in the presence of a small quantity of colloid decreases. In colorimetry of similar solns, optimum conditions must be established, i.e., the concn must be chosen so as to reduce the error to zero.

218735

OZIMOV, B. V.

OZIMOV, B. V.
Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Analytical Chemistry

②
Effect of colloids on the accuracy of photocolorimetric
analysis. K. V. Florov and B. V. Ozimov. J. Appl.
Chem. (U.S.S.R.) 25, 713-16 (1952) (Engl. translation). See
C.A. 47, 12098c. H. L. H.

92-54
JP

OZIMOV, B. V.

USSR

1. Sensitivity of a selenium cell to red solutions. B. V.
Ozimov and E. V. Petrov, *J. Appl. Chem. U.S.S.R.* 27,
195 (1954) (Engl. translation).—See C.A. 48, 8034u.
H. L. 36.1

Sensitivity of a selenium cell to red solutions. B. V. Ozmov and K. V. Pirov (USSR, Refrig. Dairy Ind., Leningrad). *Zhur. Priklad. Khim.* 27, 229-231 (1954); cf. C.A. 48, 3723b.—The red-sensitivity of a Se cell was studied and found satisfactory for photocolourimetry with: Congo red, methyl red, cresol red, phenol red, methyl orange, fuchsin, and KMnO_4 . It was most sensitive to the first and least to the last. It was more sensitive to the red of methyl orange (pH 3.1, 0.05×10^{-3} mol./l.) than to the orange (pH 4.4, 0.25×10^{-3} mol./l.). The greater the mol. wt. the greater the sensitivity except with fuchsin, which might be hydrolyzed at low concns. I. Brucowitz

① 78/9T

"APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R0012387

OZIMOV, B.V., kand. tekhn. nauk; VAL'KOVA, N.K., inzh.; GOLOVKINA, M.T.,
kand. tekhn. nauk.

Reflection spectra of solid fats. Masl.-zhir. prom. 24 no.2:10-11
'58. (MIRA 11:3)

1. Leningradskiy tekhnologicheskii institut kholodil'noy promyshlen-
nosti.

(Oils and fats--Spectra)

OZIMOV, B.V.; VOL'NOV, Yu.N.

Reflection spectra of some inorganic compounds in a medium of
organic liquids. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.1:
28-32 '61. (MIRA 14:6)

1. Leningradskiy tekhnologicheskoy institut kholodil'noy
promyshlennosti, kafedra obshchey i analiticheskoy khimii.
(Spectrum analysis) (Refractive index) (Reflection (Optics))

S/063/60/005/005/014/021
A051/A029

AUTHORS: Vol'nov, Yu.N., Ozimov, B.V.

TITLE: Reflection Spectra and Their Application to the Study of Sorption Processes

PERIODICAL: Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D.I. Mendeleeva, 1960, No. 5, Vol. 5, pp. 591-592

TEXT: Reference is made to the works of Sidorov, (Refs. 1,2) and Vedeneyeva (Ref. 3) on the application of reflection spectra to the study of adsorption phenomena and to the study made on the effect of optical factors on the reflection spectrum (Ref. 4-7). The authors of this article made a study of the possibilities of applying the reflection spectra to the study of the sorption of certain organic liquids by chromium hydroxide. Chromium hydroxide was prepared by precipitating CrCl_3 with a stoichiometric quantity of NaOH . The residue was washed with hot water until a reaction on a chlorine ion and on an alkaline ion was absent. The residue was then dried to a constant weight at 120°C . The following organic liquids were used: ethanol, ✓

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S/063/60/005/005/014/021
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

benzene, acetoacetic ether and monoethanolamine. Water was used in the control tests. The organic liquids were distilled three times and dehydrated. Their constants coincided with literature data. The solid substance $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ was passed through a sieve and the particles were 0.20-0.25 mm in size. The prepared samples of chromium hydroxide were calcinated for two hours at 120, 200, 360, 600 and 800°C. Reflection spectra were taken from all the samples, both the dry ones, as well as those mixed with the solvent (100 g $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ + 50 ml of solvent). The measurements were made in an infinitely thick layer on a CФ-2(SF-2) spectrophotometer. The measurement data are given in Fig.1. It was found that the reflection spectra of the $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ changed according to the calcinating temperature (Ref.8) and this is assumed to be connected with the change in the hydration and structure of $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$. The samples prepared at the indicated temperatures were tested in the following media: ethanol, acetoacetic ether, monoethanolamine, benzene and ethanol vapors. In order to determine the ethanol vapor sorption, $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ samples were placed in an exsiccator for 48 hours, which contained anhydrous ethanol. The data of the experiments are given in Table 1 for comparative

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S/063/60/005/005/014/021
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

purposes, using different samples. In Table 2 a comparison is made of the refraction coefficients of the light of the binding medium, the percentage of reflection at $\lambda = 589 \text{ m}\mu$ and the wavelengths corresponding to the maxima and minima of reflection of the above-indicated samples. The obtained data were found to confirm the fact that the optical properties of the binding medium have a significant effect on the reflection percentage of light. Fig 2-4 show the curves percentage of reflection versus wave-length for some of the samples of $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ obtained at the corresponding temperatures in the media of the organic liquids. The experimental data lead to the assumption that the optical properties of $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ are dependent on the binding medium. The shift of the maxima and minima percentage of reflection according to the wavelength of $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ in the organic liquid media is determined by the physico-chemical causes, of which solvation is one. There are 2 tables, 4 figures and 8 Soviet references.

Card 3/8

S/063/60/005/005/014/021
A051/A029

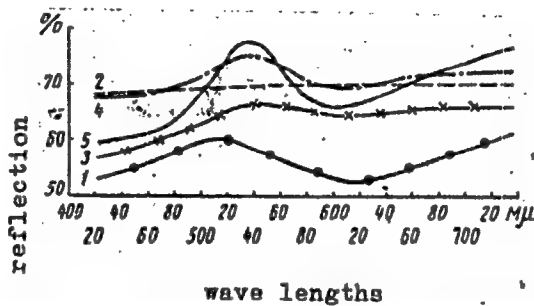
Reflection Spectra and Their Application to the Study of Sorption Processes

ASSOCIATION: Leningradskiy tekhnologicheskii institut kholodil'noy
promyshlennosti (Leningrad Technological Institute of the
Refrigeration Industry)

SUBMITTED: February 12, 1960

Figure 1:

Measurement data of the
reflection spectra:
1-120°; 2-200°; 3-360°;
4-600°; 5-800°C.



Card 4/8

S/063/60/005/005/014/021
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Table 1:

Weight increase of the percentage of reflection
of light $\lambda = 600 \text{ m}\mu$ of the $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ samples
calcinated at various temperatures

calcinating temperature °C	weight addition(in %) after sorption of the ethanol vapors	increase of the reflection per- centage after the sorption as com- pared to the initial sample
120	10	15
200	5	9
360	6	10
600	1	2
800	0,5	1

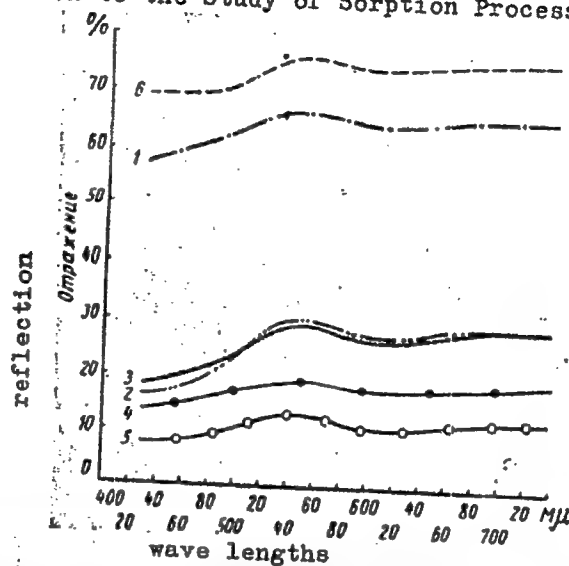
Card 5/8

S/063/60/005/005/014/021
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Figure 2:

Relationship of the reflection (%) to the wave length:
1. without solvent, 2. ethanol, 3. water, 4. acetoacetic ether, 5. ethanol amine, 6. alcohol vapors.



Card 6/8

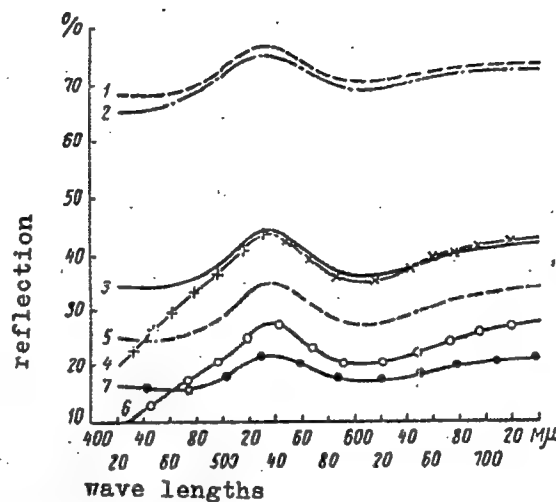
S/063/60/005/005/014/021
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Figure 3:

The same:

1. ethanol vapors, 2. without solvent, 3. ethanol, 4. water, 5. acetoacetic ether, 6. ethan-
nolamine, 7. benzene



Card 7/8

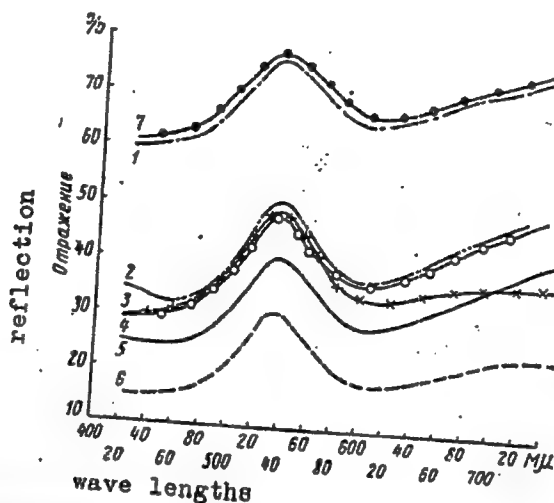
S/063/60/005/005/014/021
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Figure 4:

The same:

1. without solvent,
2. ethanol, 3. water,
4. benzene, 5. acetoacetic
- ether, 6. ethanolamine,
7. ethanol vapors



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OZIMOV, B.V., dotsent, kand.tekhn.nauk; VOROB'YENVA, L.V., kand.fiziko-
matematicheskikh nauk

Optical properties of milk. Trudy LTIKHP 13:28-34 '57.
(MIRA 13:6)

1. Kafedra obshchey i analiticheskoy khimii i kafedra fiziki
Leningradskogo tekhnologicheskogo instituta kholodil'noy
promyshlennosti.

(Milk--Spectra)

OZIMOV, B.V.; VAL'KOVA, N.K.; GOLOVKINA, M.T.

Reflection spectra used in the analysis of food products.
Trudy LTIKHP 15:81-86 '58. (MIRA 13:4)

1. Predstavlena Kafedroy neorganicheskoy i analiticheskoy
khimii Leningradskogo tekhnologicheskogo instituta kholodil'noy
promyshlennosti.
(Food--Spectra)

5(2)
AUTHOR: Ozimov, B. V. SOV/153-58-2-10/50

TITLE: The Reflection Spectra and Their Evaluation in Colorimetric Analyses (Spektry otrazheniya i ikh ispol'zovaniye v kolorimetricheskom analize)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 2, pp 58 - 62 (USSR)

ABSTRACT: The photcolorimetric analysis may be used only for transparent solutions or optically empty media. Small amounts of colloids usually distort the results of the photcolorimeter and cause great errors (Ref 1). Single components of the colloidal solutions, emulsions and coarse suspensions cannot at all be determined colorimetrically by means of the usual colorimeter. The methods of nephelometry and turbidimetry can be used in these solutions only to a certain extent as the conditions at which reproducible suspensions can be produced are difficult to prepare (Ref 2). The author tried to devise a colorimetric method

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The Reflection Spectra and Their Evaluation in
Colorimetric Analyses

SOI/153-55-2-15/30

of determining single components in disperse systems independent of the particle-sizes of the disperse phase. Reflection spectra of non-transparent colored compounds were taken as the basis of this method. EXPERIMENTAL PART. Reflection spectra of colored non-transparent solutions which, within a thin layer, permit light to pass were recorded by the spectrophotometer SF-2 using as a background, paper (Ref 3), sodium chloride, -nitrate, and sulfate (Ref 4) as well as barium sulfate (Ref 5). The author used barium sulfate which is almost insoluble and chemically inactive. Figure 1 shows that a barium sulfate paste is the best background. Figure 2 gives the reflection spectra of the inner complex salt nickel dimethyl glyoxime (ruby), also the copper ferrocyanide (brown-red), and finally the complex salt iron ferrocyanide (blue). As can be seen from figure 2 the reflection spectra are specific for each salt, and their minima are in

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The Reflection Spectra and Their Evaluation in
Colorimetric Analyses

SOV/155-56-2-10/50

different parts of the spectrum. Figures 3-5 show the reflection spectra of the same salts in dependence on their concentration. These spectra show a certain dependence between the percents of reflection and the concentration of the salt; the character of the curve does not change. This latter circumstance makes possible a quantitative determination of the content of certain ions on a BaSO_4 background by the spectrophotometric as well as by the colorimetric method. The field of application, and directions for carrying out the analysis are given. Figures 6-8 show calibration curves for determining iron, copper and nickel. There are 8 figures and 6 references, 5 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskij institut kholodil'noy promyshlennosti (Leningrad Technological Institute of Refrigerator Industry) Kafedra obshchey i analiticheskoy khimii (Chair of General and Analytical Chemistry)

Card 3/4

OZIMOV, B.V.

Reflection spectra used in colorimetric analysis. Izv. vys. ucheb.
zav.; khim.i khim.tekh. no.2:58-62 '58. (MIRA 11:7)

1. Leningradskiy tekhnologicheskii institut kholodil'noy promyshlennosti,
Kafedra obshchey i analiticheskoy khimii.
(Colorimetry) (Spectrum analysis)

OZIMOV, B. V.

USSR/ Analytical Chemistry. General Problems.

G-1

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27126.

Author : B. V. Ozimov.

Inst : Leningrad Institute of Technology of Refrigeration Industry.

Title : Colorimetric Analysis of Opaque Solutions.

Orig Pub: Sb. tr. obshchetskhn. kafedr. Leningr. tekhnol. in-ta kholodil'n. prom-sti, 1956, 12, 109 - 117.

Abstract: The colorimetric analysis of opaque solutions is carried out following the principle of reflection with the application of a corresponding background, into which the solution under study together with the reagent is introduced. Suspension of BaSO_4 or impregnated filter paper are

Card 1/2

1. *Journal of the American Medical Association*, 1997; 277: 1033-1038.

7. The following information was obtained from the above sources:

ATTN: JAMES, J. A. 2000

TITLE: Study of the Intake of ^{137}Cs and ^{134}Cs in

CITED SOURCE: Tr. Tsent. n.-i. avtomob. i avtomotorn. in-za, vyp. no. 196, 25-58

TOPIC TAGS: inlet screen, radial gas turbine, inlet guide vane, turbine engine
test 26

TRANSLATION: The line diagram of a device for static studies of gratings for the vanes of radial turbines is given. Guide vane assembly gratings differing in contour shape, thickness of the trailing edge, relative spacing and angle of profile are shown in the diagram. The separate parts manufactured by the method of the drawing are shown in the drawing.

Caro